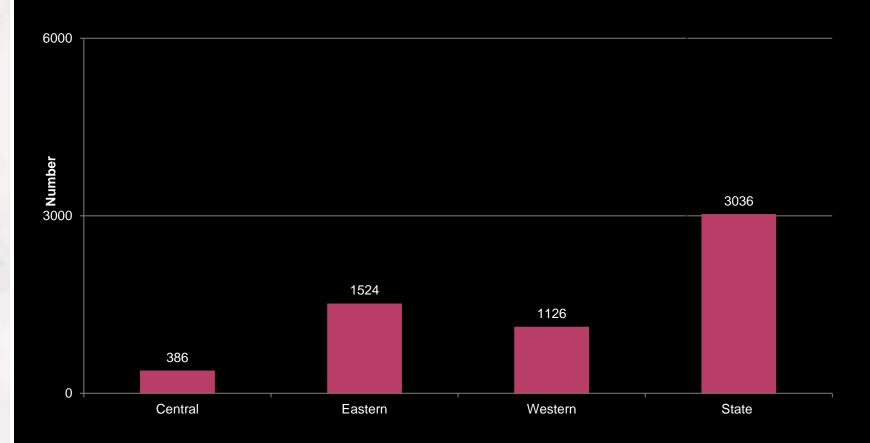
State Trauma Care Committee Report May 11, 2011

Montana Trauma Registry
January 1 – December 31, 2010

Total Patients Year 2010



Total Patients

Central Region Facilities

Fort Benton - Missouri River Medical Center	5
Browning - PHS Indian Hospital	O
White Sulphur Springs - Mountain View Med Center	5
Havre - Northern Montana Hospital	58
Townsend - Broadwater Health Center	0
Shelby - Marias Medical Center	5
Choteau - Teton Medical Center	4
Cut Bank - Northern Rockies Medical Center	0
Conrad - Pondera Medical Center	16
Chester - Liberty County Hospital	1
Great Falls - Benefis Health Care	292
Helena - St. Peter's Hospital	O

Eastern Region Facilities

Ennis - Madison Valley Hospital	15
Livingston Memorial Hospital	38
Sheridan - Ruby Valley Hospital	14
Forsyth - Rosebud Health Care Center	4
Roundup Memorial Hospital	20
Lewistown - Central Montana Hospital	35
Scobey - Daniels Memorial Hospital	0
Culbertson - Roosevelt Memorial Medical Center	22
Harlowton - Wheatland Memorial Hospital	14
Malta - Phillips County Medical Center	3
Red Lodge - Beartooth Hospital & Health Center	33
Plentywood - Sheridan Memorial Hospital	6
Columbus - Stillwater Community Hospital	6
Sidney Health Center	22
Terry - Prairie Community Hospital	5
Wolf Point - Trinity Hospital	20
Poplar - Northeast Montana Health Services	20
Glasgow - Frances Mahon Deaconess Hospital	2
Big Timber - Pioneer Medical Center	5
Hardin - Big Horn County Memorial Hospital	6
Crow Agency - PHS Indian Hospital	114
Bozeman Deaconess Hospital	194
Billings - Billings Clinic	514
Billings - Saint Vincent Healthcare	393
Circle - McCone County Health Center	0
Lame Deer Clinic	3
Colstrip Medical Clinic	16

Total

Western Region Facilities

Plains - Clark Fork Valley Hospital	8
Polson - St. Joseph Hospital	31
Anaconda - Community Hospital of Anaconda	20
Hamilton - Marcus Daly Memorial Hospital	9
Dillon - Barrett Hospital	42
Superior - Mineral County Hospital	12
Ronan - St. Luke Community Hospital	34
Deer Lodge - Powell County Memorial Hospital	24
Libby - St. John's Lutheran Hospital	0
Whitefish - North Valley Hospital	65
Philipsburg - Granite County Medical Center	12
Kalispell Regional Hospital	362
Missoula - Community Medical Center	69
Butte - St. James Healthcare	72
Missoula - St. Patrick Hospital	366

1126

Total

2010 Patient YTD Demographics

AGE

74% ages 10-64 29% > 55 yrs of age

8% < 10 of age $19\% \ge 65 \text{ of age}$

RACE

78% White 2% Other

16% Native 4% ND

GENDER

65% Male 34% Female <1% ND

2010 Patient Demographics

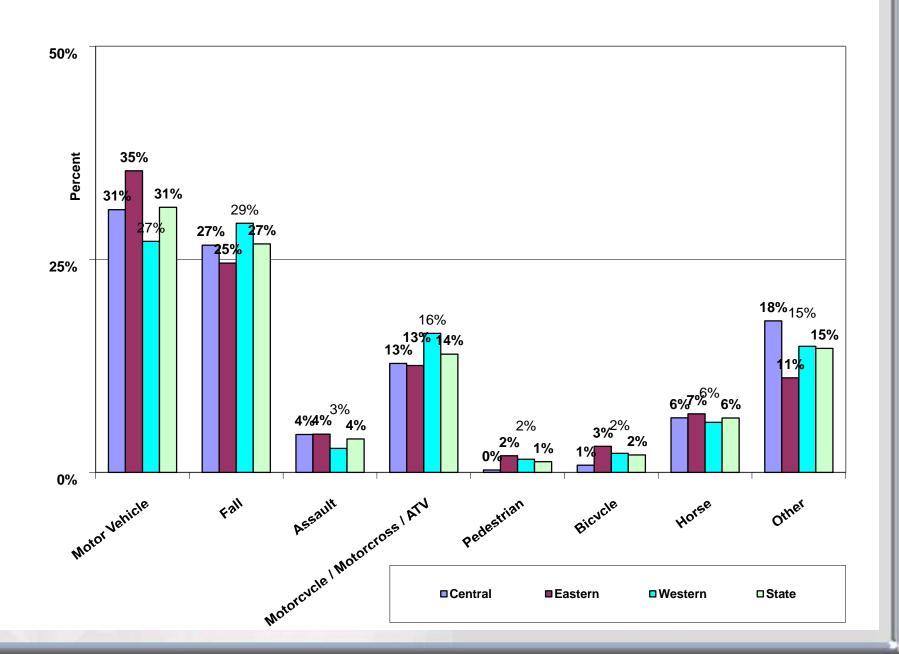
91% Blunt

6% Penetrating

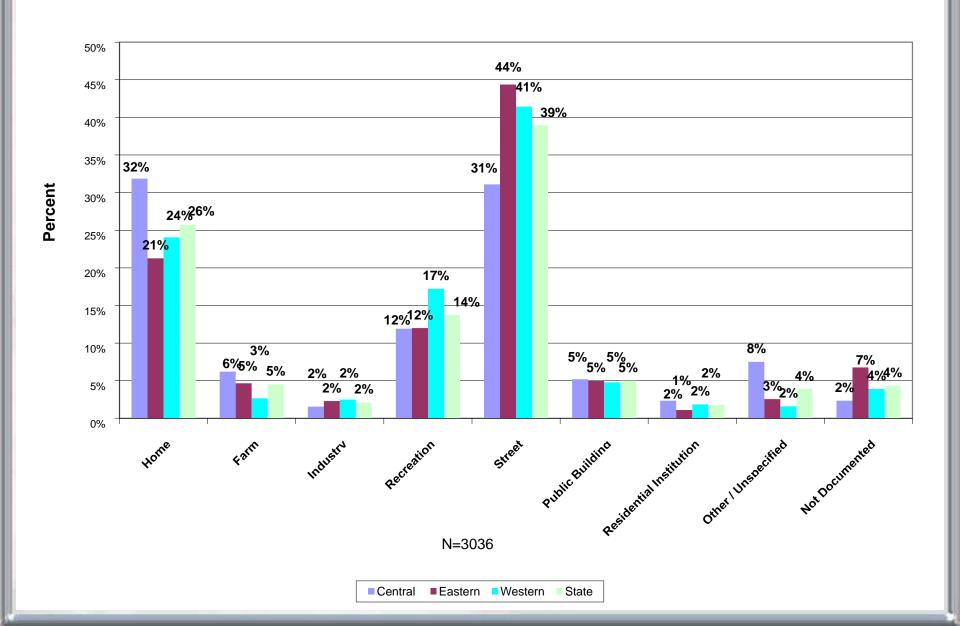
2% Burns

1% Anoxia

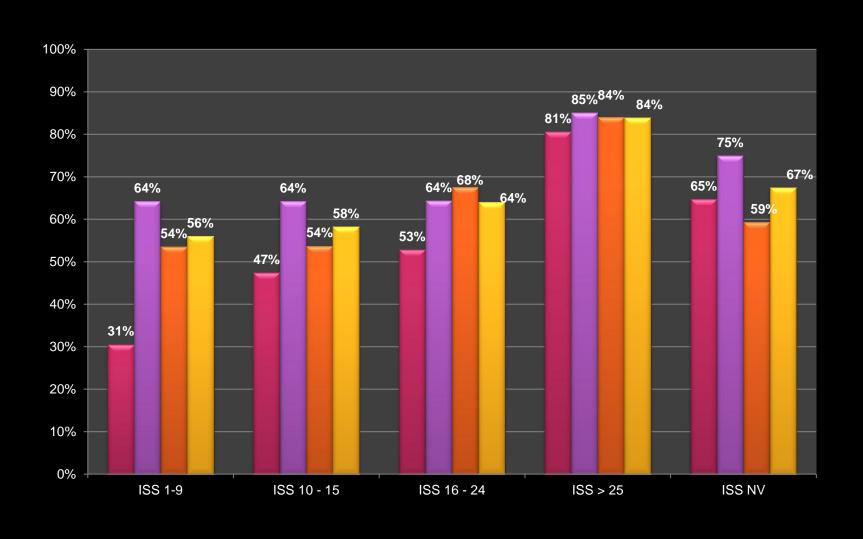
Blunt Causes



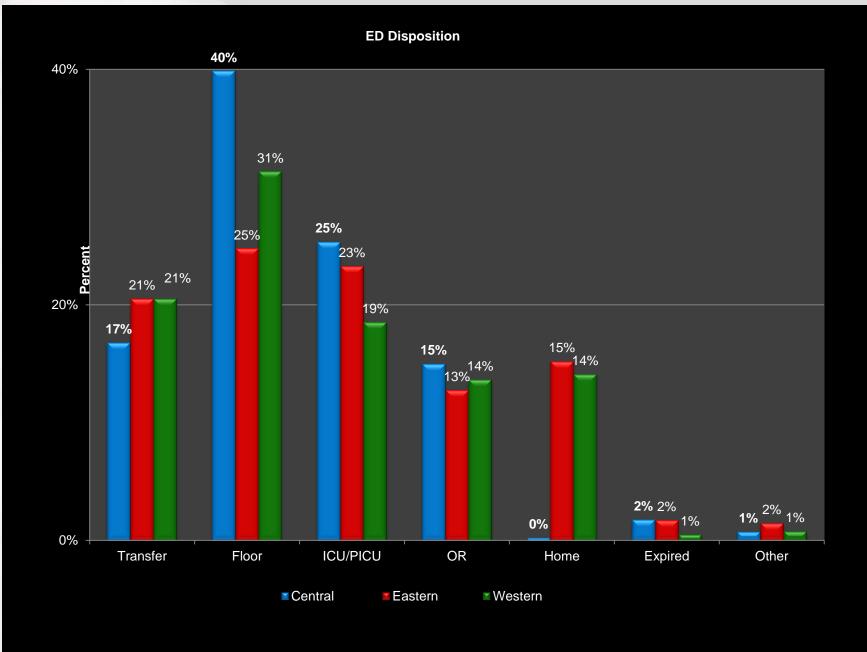
Location by Region

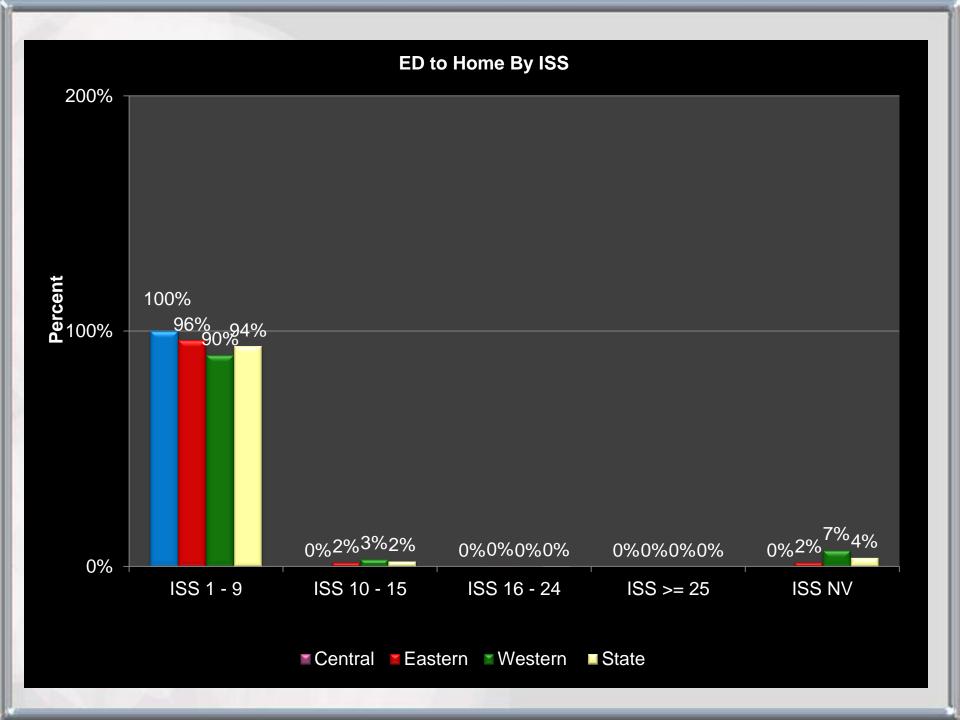


Trauma Team Activations by ISS

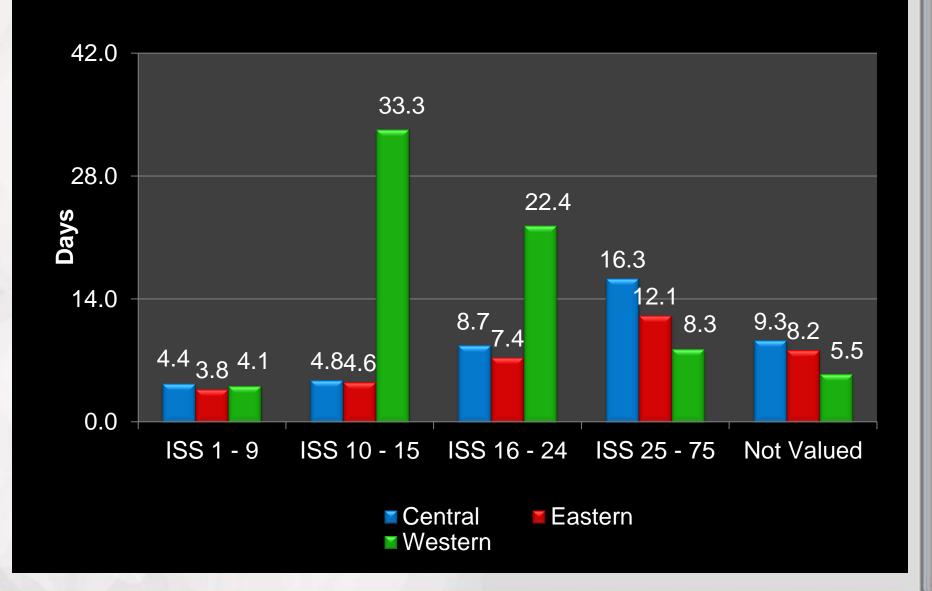


■ Central ■ Eastern ■ Western ■ State

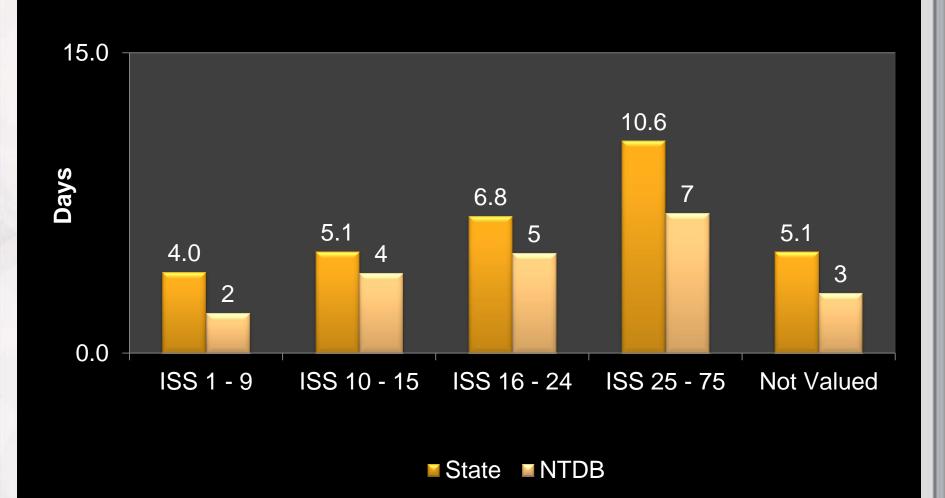




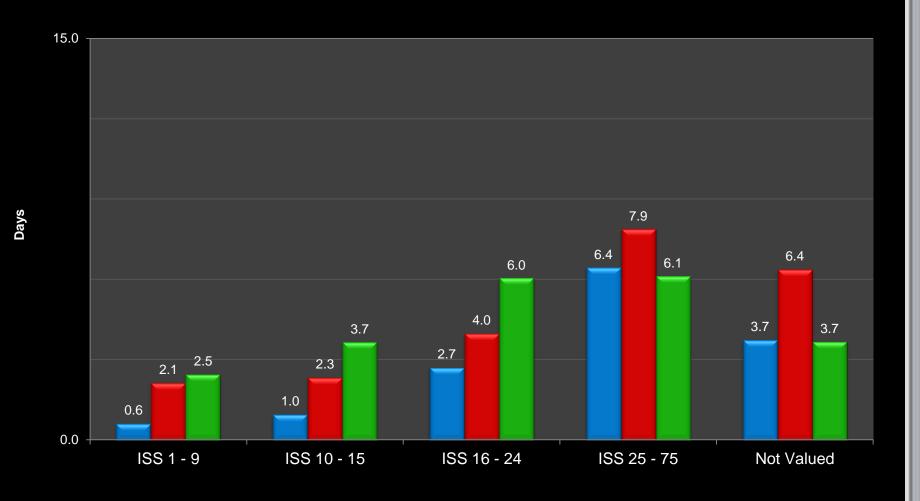
Avg. Hospital LOS by Region



Avg. Hospital LOS (Comparing State and National Trauma Registry)



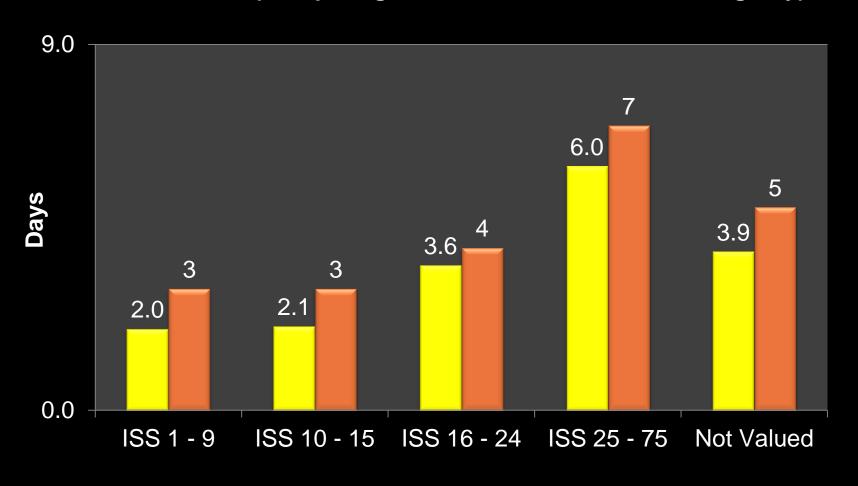
Avg. ICU LOS by Region



■ Central ■ Eastern ■ Western

Avg. ICU LOS (Comparing State and National Trauma Registry) 9.0 6.0 3.9 3.6 3 2.1 2.0 0.0 ISS 1 - 9 ISS 10 - 15 ISS 16 - 24 Not Valued ISS 25 - 75 ■State ■NTDB

Avg. ICU LOS
(Comparing State and National Trauma Registry)





*Fatalities N= 121

Type of Injury	#	Type of Injury	#
MVC (30%)	36	Hanging	6
Falls (24%)	29	Farm/Machine	3
MCC/ATV (10%)	12	Skiing	2
SIGSW	9	Pedestrian	7
AccGSW	2	Burns	2
Environmental Assoc	2	Drowning	4
Assault	4	Horse Related	2
Crush	1		

Fatalities

MVC: 36

Restraint

No Restraint

12

23

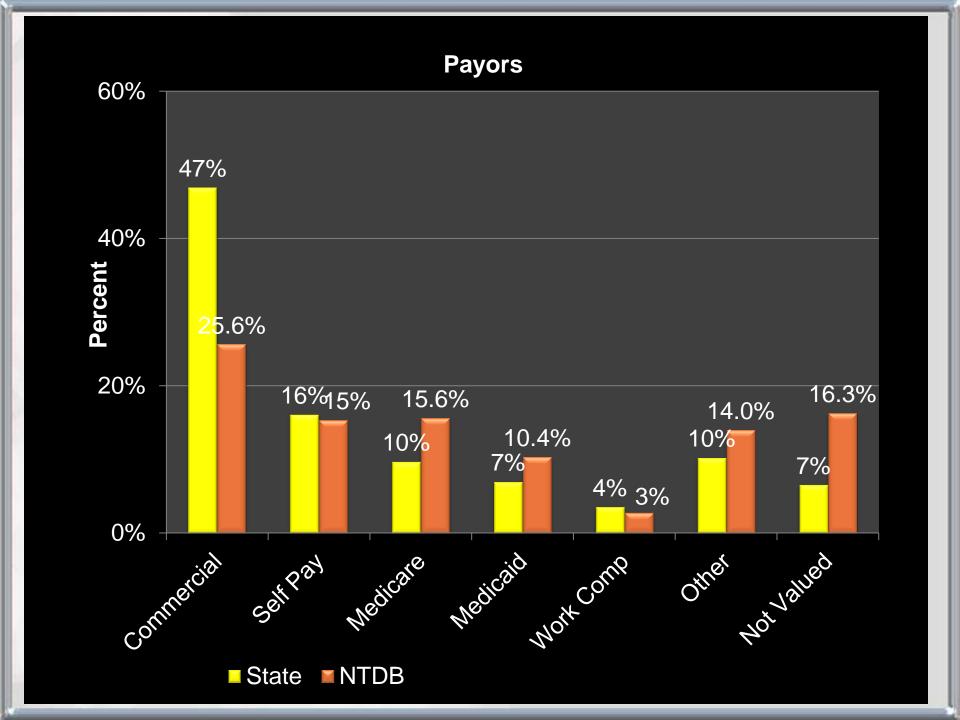
MCC/ATV: 12

Helmet

No Helmet

5

7



Performance Indicators

Year 2010

PI # 1: Trauma Patients Transp by EMS W/O Trip Report in the Medical Record

Prehospital transports

Central: 268

Ground Ambulance: 247

+ Report: 156 (63%)

No Report: 91 (37%)

Eastern: 1079

Ground Ambulance: 1044

+ Report: 823 (79%)

No Report: 221 (21%)

Western: 812

Ground Ambulance: 704

+ Report: 469 (66%)

No report: 235 (34%)

PI # 1 cont'd Ground Ambulance Inter-facility Transfers w/out trip reports

Central 127 total transfers:

Ground transfers = 55 w /trip report =20 (36%) w/o trip report= 35 (64%)

Flight transfers = 72

PI#1cont'd

Ground Ambulance Interfacility Transfers w/out trip reports

Eastern = 387 total transfers
 Ground ambulance = 182
 w/trip report = 99 (54%)
 w/o trip report = 83 (46%)

Flight transfers = 205

PI#1cont'd

Ground Ambulance Interfacility Transfers w/out trip reports

Western = 178 total transfers
 Ground ambulance = 87
 w/trip report 53 (61%)
 w/o trip report 34 (39%)

Flight transfers = 91

PI # 2: Transferred Trauma Patients w/ISS \geq 15 & time at first facility \geq 6 hrs

- 8 YTD transfers w/ISS ≥ 15 & time
 - @ facility \geq 6 hrs
- 3 transferred from ED: w/ weather issues
- 5 transfers who were admitted as inpatients @referring facility/ then transferred to Regional Trauma Centers

PI #3: Trauma patients with ISS > 15 and ED time > 2 hours

Level II facilities excluded

YTD: 188 trauma patients needing transfer

- YTD Average ED time to transfer,

Area TH: 3.2 hr

Community TH: 3.1 hr

Trauma Receiving Facility: 3.55 hr

- YTD Average ISS: 21

PI # 4:

Trauma patients who died with an ISS ≤ 15

Central Region N= 6

- 1 "undercoded" died, lack of complete dx
- 4 elderly patients w/low ISS, +++comorbidities
- 1 Burn patient

PI # 4: Trauma patients who died with an ISS ≤ 15

Eastern Region N=6

- 5 "undercoded" died ED, lack of complete dx
- 1 elderly w/low ISS, +++ comorbidities

PI # 4: Trauma patients who died with an ISS ≤ 15

Western Region N=11

6 "undercoded" died ED, lack of complete dx

3 elderly w/low ISS, +++comorbidities

2 fall w/CHI: ON COUMADIN/PLAVIX,